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INITIAL SITE INVESTIGATION REPORT

SAVELLE FARM
Holland Pond Road, TH#4
Holland, Vermont
(VT DEC Site #97-2137)

28 May 1997

Prepared for:

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EXECUTIVE SUMMARY

Marin Environmental has conducted an initial site investigation at the Savelle Farm located on the Holland Pond Road in Holland, Vermont and has concluded the following:

- Residual soil contamination appears to have impacted ground water in the vicinity of the removed diesel underground storage tank (UST). Analytical results of ground water samples collected from four on-site monitoring wells detected the presence of petroleum compounds above the Ground Water Enforcement Standard in the source area only.
- Observations made during monitoring well installations, supplemental soil borings and recent ground-water sample results from monitoring wells suggest that residual soil contamination is limited to the immediate vicinity of the former diesel UST.
- Based on laboratory analytical results, a bedrock supply well, located approximately 25 feet from the former tank location, has not been impacted but may be at risk from the residual soil and ground-water contamination at the site. This well was installed in December 1996, but has not been placed in service. Contamination does not appear to pose a threat to any other identified sensitive receptors.
- The degree and extent of contamination in the underlying bedrock have not been determined. In the immediate vicinity of the former UST, soils directly above bedrock were found to contain significant petroleum contamination.

On the basis of the results of this investigation, Marin Environmental makes the following recommendations:

1. The four on-site monitoring wells should be resampled to confirm the March 1997 analytical results. The samples should be analyzed for petroleum-related compounds by EPA Method 8020 and for Total Petroleum Hydrocarbons (TPH) by modified EPA Method 8100.
2. The on-site bedrock supply well should be abandoned and relocated to minimize the potential impact.

1.0 INTRODUCTION

This report details the results of an initial site investigation conducted at the Savelle Farm located on the Holland Pond Road (TH#4) in the town of Holland, Vermont (Figure 1). This report has been prepared by the Ground Water of Vermont division of Marin Environmental, Inc. (MARIN) for Jay Savelle, the property owner at the time of tank closure. The site investigation was initiated with Vermont Department of Environmental Conservation (VT DEC) approval following the discovery of subsurface petroleum contamination during the removal of one underground storage tank (UST) on 2 February 1997.

1.1 Site Location and Physical Setting

The site is an operating dairy farm located approximately 2.5 miles northeast of the Valley Road in Holland, Vermont. The site consists of the two-story wood-framed residence, dairy barn and outbuildings aligned approximately 100 feet west of the gravelled roadway.

The ground surface around the buildings has an average elevation of about 1380 feet above mean sea level and slopes toward the east at a 5-10% grade. Surrounding areas consist of open cultivated hay fields and pasture land. The direction of ground-water flow in the area is presumed to be eastward, following the topography. The Holland Brook is located approximately 1,000 feet east and topographically downgradient of the site.

Drinking water for the site is currently provided by a public water-supply system owned and operated by the International Water Company. The system water supply is obtained from Holland Pond, located approximately 2 miles east and topographically upgradient of the site. International Water Company is abandoning service to the area and is providing new supply wells to affected customers. A new on-site 300 foot deep bedrock supply well was installed at the Savelle farm in December 1996 but has not yet been placed in service. The well is located approximately 50 feet north of the roadway adjacent to the cattle barn, approximately 25 feet south of the former UST location. The drillers log for this well is included in Appendix B.

new well 12/96

Native surficial materials in the vicinity of the site are mapped as glacial till (Stewart and MacClintock, 1970). Bedrock in the area is mapped as the Barton River member of the Waits River Formation, which is composed of interbedded limestones and phyllite (Doll, 1961).

1.2 Site History

UST removed 2/97

The Savelles owned the property from 1995 to March 1997, when they sold the property to David and Cynthia Merrill. The site has historically been used for agricultural purposes.

On 6 February 1997, the UST was removed by personnel from Roger Gosselin, Inc. (Gosselin's Excavating) of Derby, Vermont. The removed UST was a 500-gallon out-of-service single-walled steel, diesel UST of unknown age, located approximately 75 feet from the western edge of the roadway. Piping from the UST reportedly ran in the immediate vicinity of the tank.

SOP diesel

The tank was reported to be in poor condition upon removal, with surface rust, deep pitting and numerous holes. Soils in the UST excavation consisted of topsoil, underlain by a silty clay to bedrock at a depth of 10 feet below ground surface (bgs). A strong petroleum odor and stained soils were observed throughout the entire bottom of the excavation. Ground water was observed in the excavation at a depth of nine feet bgs.

Ted Unkles of the Vermont Department of Environmental Conservation (VT DEC) Sites Management Section (SMS) was immediately notified by telephone of the presence of diesel contamination at the site.

All excavated soils were subsequently returned to the excavation pending further review.

MARIN initiated an initial site investigation after receiving approval on 26 February 1997 from Mr. Jay Savelle and the VT DEC to investigate the degree and extent of contamination under the Expressway Notification procedure.

1.3 Objectives and Scope of Work

The objectives of this initial site investigation were to:

- Evaluate the degree and extent of petroleum contamination in soil and ground water;
- Qualitatively assess the risks to environmental and public health via relevant sensitive receptors and potential contaminant migration pathways; and
- Identify potentially appropriate monitoring and/or remedial actions based on the site conditions.

To accomplish these purposes, MARIN has:

- Reviewed existing historical site data.
- Supervised the re-excavation at the UST pit, and installation of four monitoring wells and three soil test pits, and determined the lateral extent of soil contamination, and the local ground-water flow direction and gradient.
- Screened subsurface soils from the test pits for the possible presence of volatile organic compounds (VOCs) using a photoionization detector (PID).
- Collected and submitted ground-water samples from the on-site monitoring wells for laboratory analysis of volatile petroleum compounds and total petroleum hydrocarbons.
- Identified sensitive receptors in the area, and assessed the risk posed by the contamination to these potential receptors.
- Evaluated the need for treatment and/or a long-term monitoring plan for the site.
- Prepared this summary report, which details the work performed, qualitatively assesses risks, provides conclusions and offers recommendations for further action.

2.0 INVESTIGATIVE PROCEDURES AND RESULTS

2.1 Soil Boring / Monitoring Well Installation

On 27 February 1997, Marin Environmental supervised the re-excavation of the UST pit and installation of four monitoring wells (MW-1, MW-2, MW-3 and MW-4) and three additional test pits (TP-1, TP-2 and TP-3). Approximate monitoring well/test pit locations are shown on Figure 2. The monitoring wells were installed by Roger Gosselin Inc. (Gosselin's Excavating) of Derby, Vermont using a tracked excavator.

The soils encountered in each test pit generally consisted of glacial till material and fractured bedrock. The excavation for monitoring well MW-1 was completed to a depth of 10 feet bgs; MW-2 to 9 feet bgs; MW-3 to 8 feet bgs and MW-4 to 6 feet bgs. Test pit TP-1 and TP-2 were completed to a depth of 6 feet bgs and TP-3 to 8 feet bgs. Each test pit was excavated to bedrock. With the exception of TP-3, ground water was encountered in each excavation.

Monitoring wells were constructed in each excavation by placement of a six-inch-diameter hand-slotted PVC sleeve around a two-inch-diameter PVC monitoring well. The tops of the 0.010-inch factory-slotted well screen segments were set about three feet below the ground surface. Sections of solid PVC were added to bring the tops of the well casings to approximately 0.5 feet bgs. Sand was placed in the annulus between the two-inch and six-inch screened sections to nominally one foot above the slotted interval. A bentonite pellet seal, approximately one foot thick, was set above the sand pack and the remainder of the annular space was backfilled with native material. Each completed monitoring well was protected at the surface by a flush-mounted steel roadbox. Each well casing was topped with a water-tight expansion plug. None of the monitoring wells were developed after installation. Monitoring-well construction details are included on the soil-boring and well-construction logs in Appendix B.

2.2 Soil-Screening Results

A MARIN engineer screened soil samples from each excavation for the possible presence of volatile organic compounds (VOCs) using a Photovac Model TIPII portable photoionization detector (PID). The PID was calibrated with an isobutylene standard gas to a benzene reference.

PID readings at monitoring well MW-1, installed in the former UST location, ranged from 38.4 to 768 ppm, with the highest reading obtained at an excavated depth of approximately 3 feet bgs. The lowest reading was obtained at the point of bedrock refusal at a depth of 10 feet bgs. In order to determine the lateral extent of soil contamination and evaluate the potential for on-site stockpiling of contaminated soils — additional excavation was performed radially from the former tank location. Soil samples obtained at a depth of 6 feet bgs and 8-10 feet laterally from the former UST location had PID readings ranging from 688

ppm to 1,481 ppm. Test pit TP-1, located approximately 15 feet west of the former tank location, had PID readings ranging from 0.3 to 1.1 ppm. Test pit TP-2, located approximately 13 feet north of the UST excavation, had PID readings ranging from 0.2 to 884 ppm, with the highest reading obtained at a depth of 6 feet bgs. Test pit TP-3, located approximately 35 feet northeast of the UST excavation had PID readings ranging from 0.3 to 0.4 ppm. PID screening results are included in boring logs in Appendix B.

2.3 Determination of Ground-Water Flow Direction and Gradient

Ground water in the unconfined surficial aquifer directly beneath the site appears to be flowing in a southeasterly direction. The average gradient of the local ground-water table on 13 March 1997 was about 0.45 percent. Water-level measurements and elevation calculations are presented in Table 1. The ground-water contour map in Figure 3 was prepared using this data.

TABLE 1

Well I. D.	Top of Casing Elevation *	Depth to Water (feet, TOC)	Ground Water Elevation
MW-1	99.53	2.78	96.75
MW-2	98.35	2.93	95.42
MW-3	100.00	3.30	96.70
MW-4	98.47	2.92	95.55

*Top of casing (TOC) and ground water elevations are relative to an arbitrary site datum of 100.00 feet

Fluid levels were measured in the four monitoring wells on 13 March 1997. The depth to water varied from 2.78 feet (MW-1) to 3.30 feet (MW-3) below top-of-casing. No free-phase diesel fuel was observed in any of the on-site monitoring wells. Static water-table elevations were computed for each monitoring well by subtracting the measured depth-to-water readings from the surveyed top-of-casing elevations, which are relative to an arbitrary site datum of 100.00 feet.

2.4 Ground-Water Sampling and Analysis

Ground-water samples were obtained for laboratory analysis from the on-site bedrock supply well and the four monitoring wells on 7 and 13 March 1997, respectively. The ground-water analytical results indicate evidence of residual ground-water contamination at the site in the vicinity of the former diesel UST. Ethylbenzene, toluene and xylenes were detected in a ground-water sample obtained from monitoring well MW-1 at 144, 10.4 and 531 parts per billion (ppb) respectively. Xylenes were detected at low levels in all remaining monitoring wells. Total petroleum hydrocarbons (TPH) were detected only in the MW-1 ground-water sample at a concentration of 13.0 ppm. All remaining monitoring well ground-water samples were non-detect (ND) for TPH. None of the tested parameters were detected in a water

sample obtained from the on-site supply well. Ground-water analytical results are summarized in Table 2 below. Laboratory report forms are included in Appendix C.

TABLE 2

Well I.D.	Benzene	Ethyl benzene	Toluene	Xylenes	MTBE	TPH
MW-1	ND <5	**144**	**10.4**	**531**	ND <5	**13.0 ppm**
MW-2	ND <1	ND <1	ND <1	1.3	ND <1	ND <1 ppm
MW-3	ND <1	ND <1	ND <1	1.2	ND <1	ND <1 ppm
MW-4	ND <1	ND <1	ND <1	1.0	ND <1	ND <1 ppm
MW-1 Dup	ND <50	**182**	TBQ <50	**531**	ND <50	**15.1 ppm**
Supply Well	ND <1	ND <1	ND <1	ND <1	ND <1	ND <1 ppm
VGES*	**5**	**680**	**2,420**	**400**	**40**	---

Results reported as parts per billion (ppb), unless noted otherwise.
ND = Not detected above indicated detection limit.
VGES = Vermont Groundwater Enforcement Standard, * Vermont Health Advisory for MTBE.
TBQ = Trace Below Quantification

Each monitoring well was purged and then sampled using a dedicated bailer and dropline. Purge water was discharged directly to the ground in the vicinity of each well. Trip blank and duplicate samples were collected during the sampling event for quality assurance/quality control (QA/QC) purposes. All field procedures were conducted in accordance with Marin Environmental standard protocols.

The ground-water samples were submitted to Endyne, Inc. of Williston, Vermont, where they were analyzed for the possible presence of benzene, toluene, ethylbenzene, xylenes (collectively termed BTEX) and methyl-tertiary butyl ether (MTBE) by EPA Method 8020 and total petroleum hydrocarbons (TPH) by modified EPA Method 8100. Analytical results from the QA/QC samples indicate that adequate QA/QC was maintained during sample collection and analysis. None of the BTEX compounds or MTBE were detected in the trip-blank sample and the analytical results for the blind field-duplicate sample were within 26% for the BTEX compounds and within 16% for TPH.

3.0 SENSITIVE RECEPTOR SURVEY AND RISK ASSESSMENT

3.1 Sensitive Receptor Survey

Marin Environmental conducted a survey to identify sensitive receptors in the vicinity of the site that could potentially be impacted by the residual contamination. The following sensitive receptors were identified in the vicinity of the site:

- An on-site bedrock supply well, reported to be 300 feet deep, installed to serve the on-site residence, but not yet in service, located approximately 25 feet south of the former tank location.
- The on-site residence constructed on a poured concrete foundation.
- Holland Brook located approximately 1000 feet northeast and downgradient of the site.
- Holland Pond located approximately 2 miles east and topographically upgradient of the site.

3.2 Risk Assessment

Marin assessed the risks that the residual subsurface contamination poses to the receptors identified above. In general, human exposure to petroleum related contamination is possible through inhalation, ingestion, or direct contact while impacts to environmental receptors are due either to a direct release or contaminant migration through one receptor to another or along a preferential pathway.

The findings of our risk assessment indicate that the residual subsurface diesel contamination at the site may pose a threat to the on-site bedrock drinking water well. Although no petroleum contamination was detected in the well, significant petroleum contamination was observed at the bedrock surface beneath the former UST, which suggests that petroleum contamination may have entered bedrock fractures. According to the drillers log, the well intercepted a water bearing fracture zone at a depth of only 29 feet bgs. The potential exists for a hydraulic connection between bedrock fractures beneath the former UST and fractures intercepted by the bedrock supply well.

On the other hand, the residual petroleum contamination at the site does not appear to pose a significant threat to the on-site residence, Holland Brook or Holland Pond. Observations made during re-excavation of the former UST location and recent ground-water sample results from monitoring wells completed in and downgradient of the area suggest that residual contamination in soil and shallow ground water is limited to the immediate vicinity of the former diesel UST. Current information suggests that it is unlikely that significant contamination will reach the two surface water bodies identified above. The on-site residence appears to be upgradient from the former UST, and visual inspection and PID screening of the on-site building cellar did not indicate an impact from the petroleum release to this receptor — no petroleum odors or seeps were observed and a PID reading of 0.1 ppm was recorded.

4.0 CONCLUSIONS

Based on the results of the site investigation described above, Marin Environmental concludes the following:

- Residual soil contamination appears to have impacted ground water in the vicinity of the removed diesel underground storage tank (UST). Analytical results of ground water samples collected from four on-site monitoring wells detected the presence of petroleum compounds above the Ground Water Enforcement Standard in the source area only.
- Observations made during monitoring well installations, supplemental soil borings and recent ground-water sample results from monitoring wells suggest that residual soil contamination is limited to the immediate vicinity of the former diesel UST.
- Based on laboratory analytical results, a bedrock supply well, located approximately 25 feet from the former tank location, has not been impacted but may be at risk from the residual soil and ground-water contamination at the site. This well was installed in December 1996, but has not yet been placed in service. Contamination does not appear to pose a threat to any other remaining identified sensitive receptors.
- The degree and extent of contamination in the underlying bedrock have not been determined. In the immediate vicinity of the former UST, soils directly above bedrock were found to contain significant petroleum contamination.

5.0 RECOMMENDATIONS

On the basis of the results of this investigation and the conclusions stated above, Marin Environmental Vermont recommends the following:

- The four on-site monitoring wells should be resampled to confirm the March 1997 analytical results. The samples should be analyzed for petroleum-related compounds by EPA Method 8020 and for Total Petroleum Hydrocarbons (TPH) by modified EPA Method 8100.
- The on-site bedrock supply well should be abandoned and relocated to minimize the potential impact.

6.0 REFERENCES

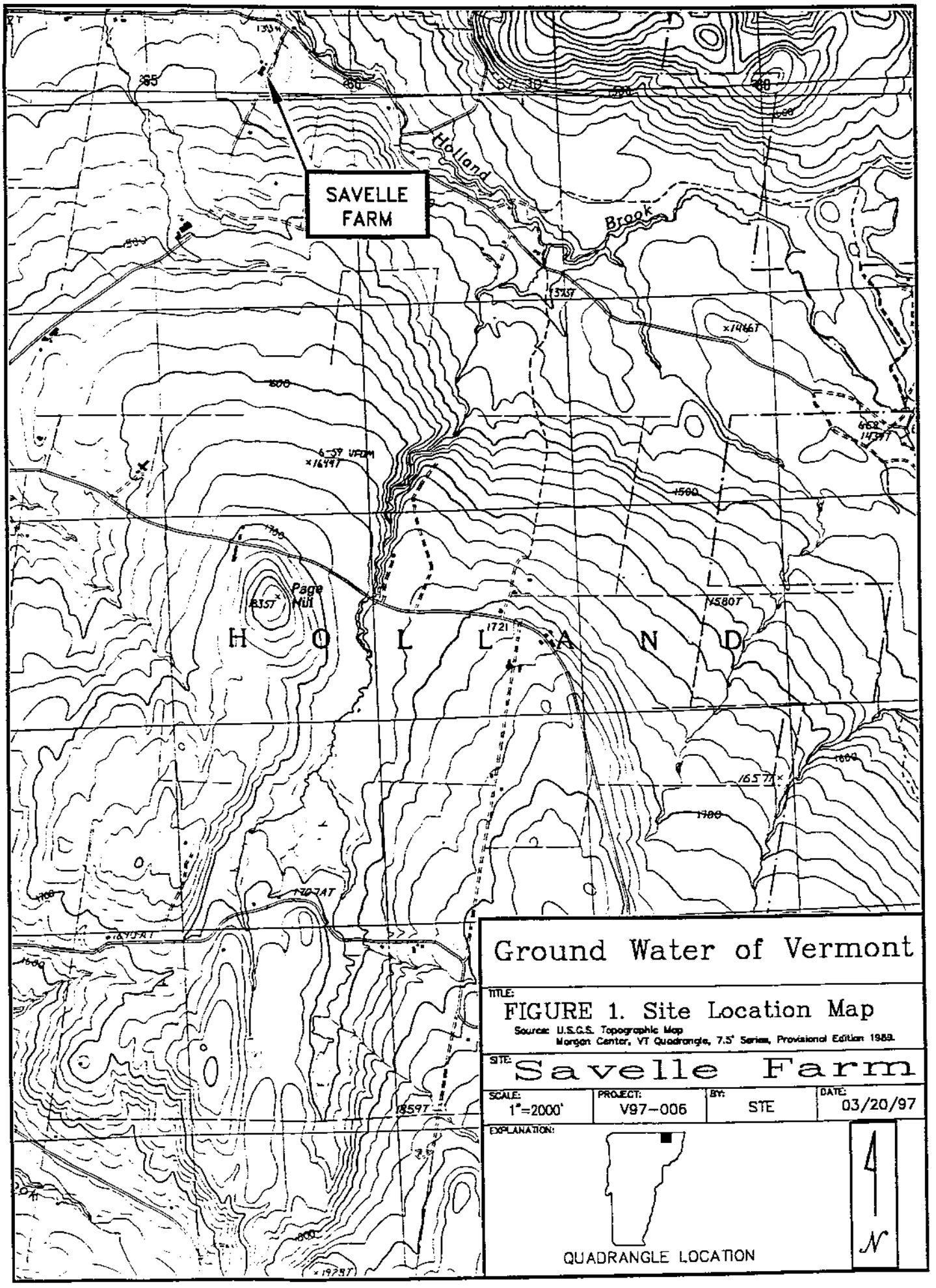
Doll, C.G. and others, 1961. *Geologic Map of Vermont*, Office of the State Geologist.

Stewart, D.P. and MacClintock, P., *1970. Surficial Geologic Map of Vermont*, Office of the State Geologist.

USGS, 1989. Morgan Center Quadrangle Vermont. U.S. Geological Survey. 7.5x15 minute series (topographic). Provisional Edition, 1989.

APPENDIX A

Figures



Ground Water of Vermont

TITLE:

FIGURE 1. Site Location Map

Source: U.S.G.S. Topographic Map
Morgan Center, VT Quadrangle, 7.5' Series, Provisional Edition 1988.

SITE: **Savelle Farm**

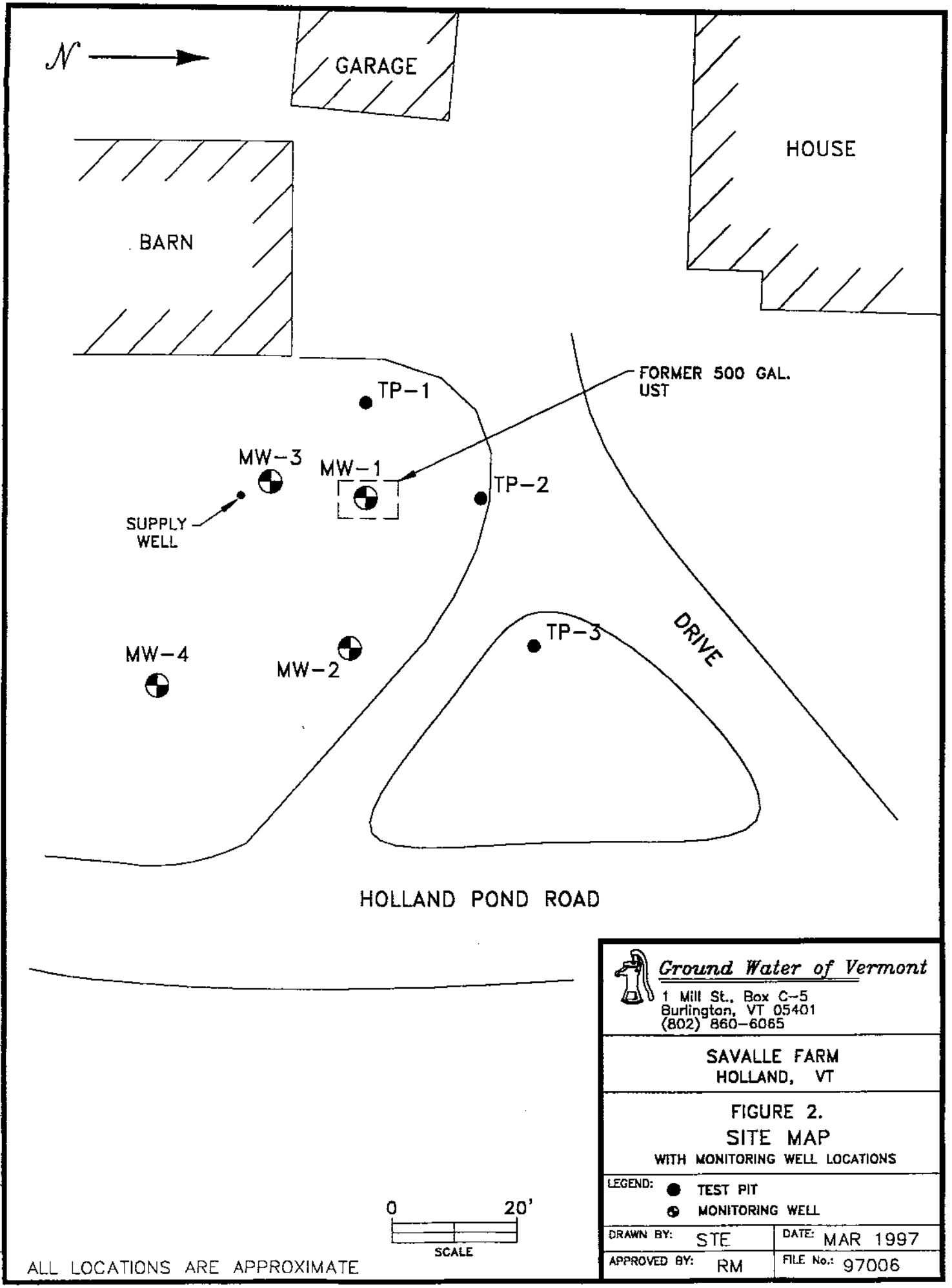
SCALE:	PROJECT:	BY:	DATE:
1"=2000'	V97-006	STE	03/20/97

EXPLANATION:

QUADRANGLE LOCATION

4

N



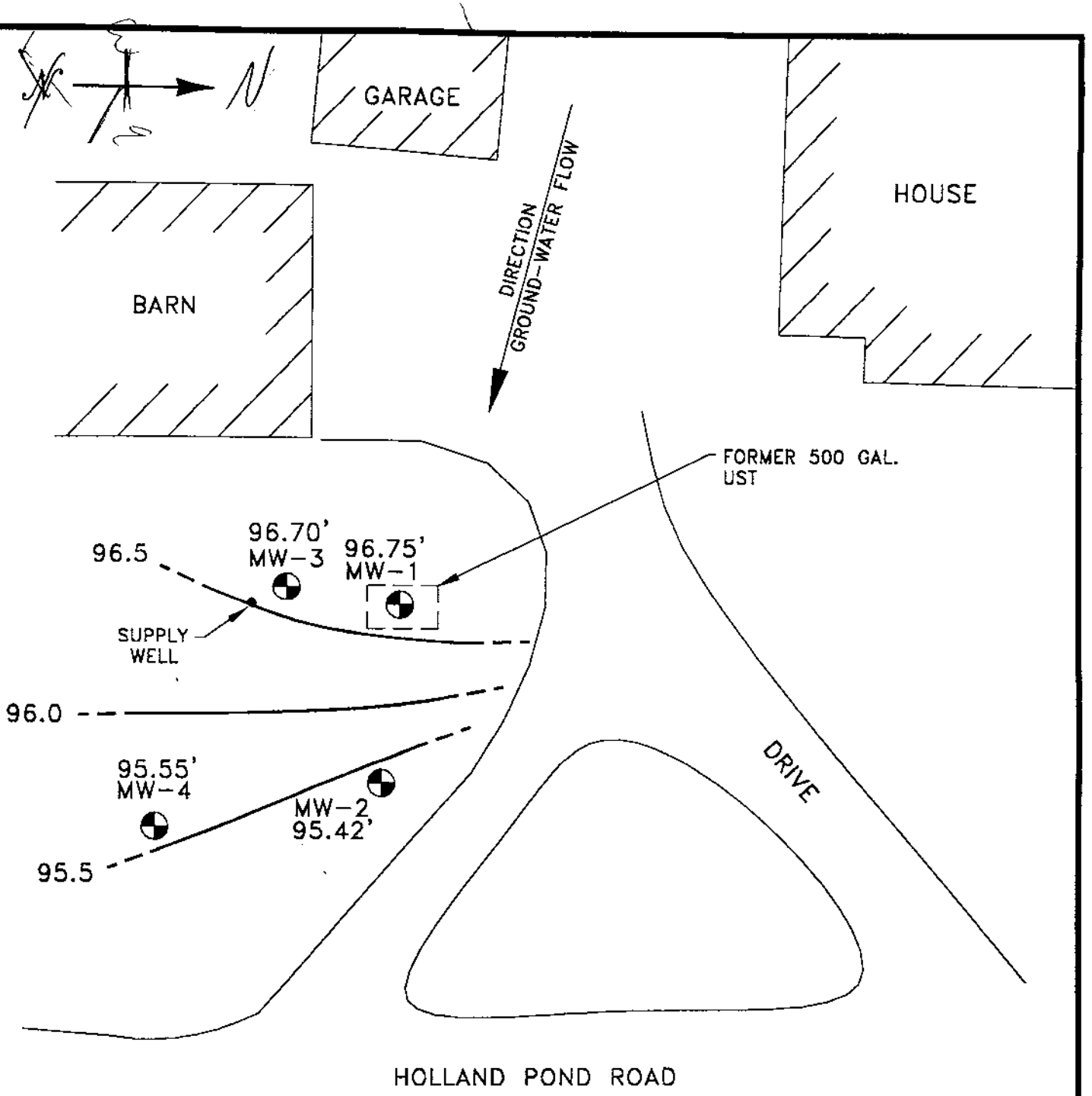
Ground Water of Vermont
1 Mill St., Box C-5
Burlington, VT 05401
(802) 860-6065

SAVALLE FARM
HOLLAND, VT

FIGURE 2.
SITE MAP
WITH MONITORING WELL LOCATIONS

LEGEND: ● TEST PIT
⊕ MONITORING WELL

DRAWN BY: STE	DATE: MAR 1997
APPROVED BY: RM	FILE No.: 97006



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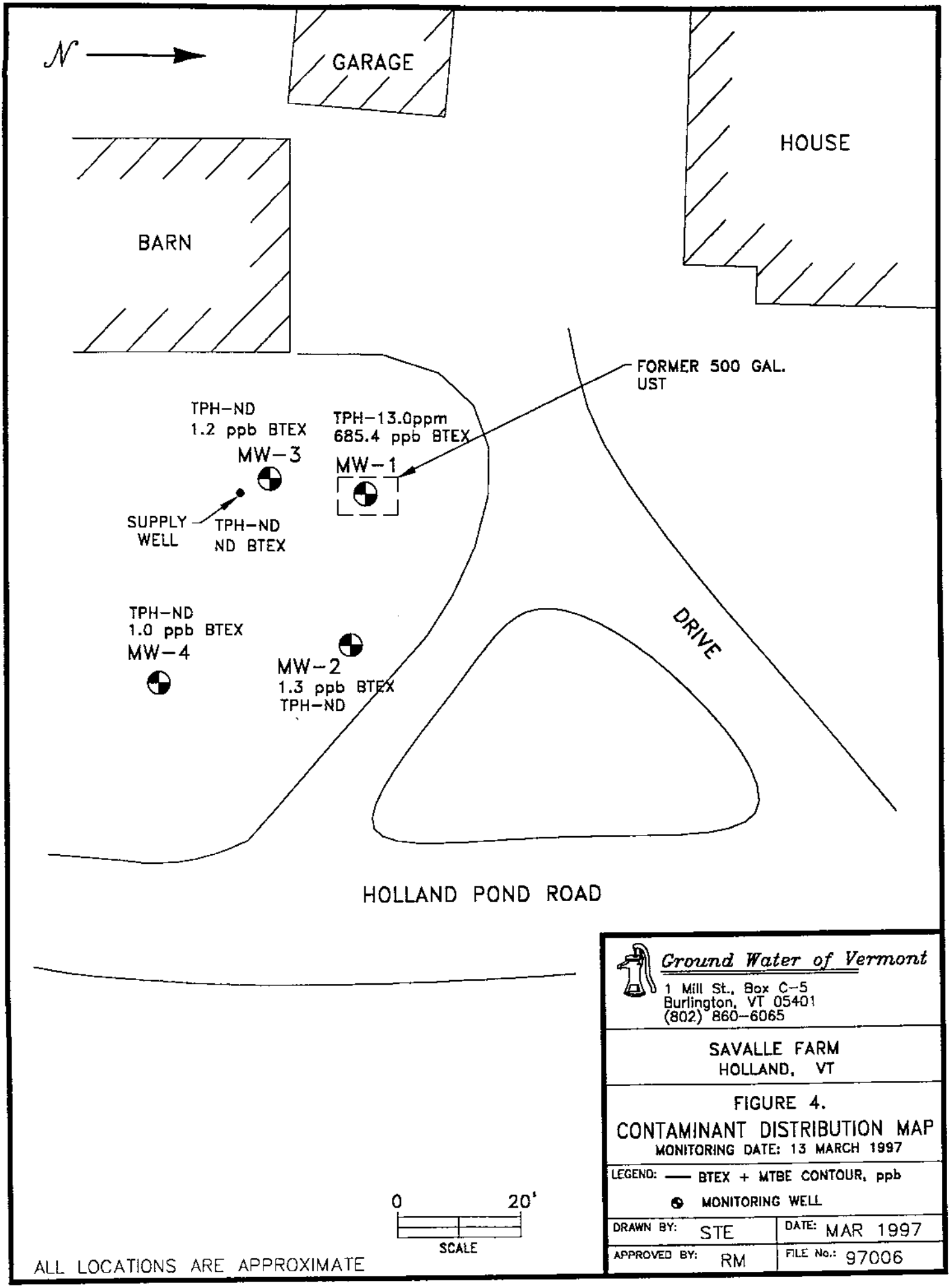
SAVALLE FARM
HOLLAND, VT

FIGURE 3.
GROUND-WATER CONTOUR MAP
MONITORING DATE: 13 MARCH 1997

LEGEND: — GROUND-WATER CONTOUR
⊕ MONITORING WELL

DRAWN BY: STE	DATE: MAR 1997
APPROVED BY: RM	FILE No.: 97006



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SAVALLE FARM
HOLLAND, VT

FIGURE 4.
CONTAMINANT DISTRIBUTION MAP
MONITORING DATE: 13 MARCH 1997

LEGEND: —— BTEX + MTBE CONTOUR, ppb
MONITORING WELL

DRAWN BY: STE	DATE: MAR 1997
APPROVED BY: RM	FILE No.: 97006

APPENDIX B

Soil Boring and Well Construction Logs

WELL NO / TAG NO
154-96
(For Driller's Use)

This report must be completed and submitted to the Department of Environmental Conservation, Water Supply Division, 103 South Main Street, The Old Pantry, Waterbury, VT 05671-0403 no later than 90 days after completion of the well.

State of Vermont
Dept. of Environmental Conservation
103 S. Main St., The Old Pantry
Waterbury, VT 05671-0403

WELL COMPLETION REPORT

DEPARTMENT USE ONLY
E.C. ________ U.S.G.S ________
Field Location ☐ Map area ________
Latitude ________ Elev. ________
Longitude ________ Topo. ________
Scale: 62,500 ☐, 25,000 ☐, 24,000 ☐
Data in Town Files ☐
Location map attached to WCR ________

1 WELL OWNER Jay Savelle, RR1 Box 86A Derby Line, VT (Permanent Mailing Address)
OR
WELL PURCHASER International Water Company (Permanent Mailing Address)

2 LOCATION OF WELL TOWN Holland SUBDIVISION ________ LOT NO. ________

3 DATE WELL WAS COMPLETED 12/13/96

4 PROPOSED USE OF WELL ☑ Domestic, ☐ Other ________

5 REASON FOR DRILLING WELL ☐ New Supply, ☑ Replace Existing Supply, ☐ Deepen Existing Well, ☐ Test or Exploration, ☐ Provide Additional Supply, ☐ Other ________

6 DRILLING EQUIPMENT ☐ Cable Tool, ☑ Rotary with A-H, ☐ Other ________

7 TYPE OF WELL ☑ Open Hole in Bedrock, ☐ Open End Casing, ☐ Screened or Slotted, ☐ Other ________

8 TOTAL DEPTH OF WELL 300 feet below land surface

9 CASING FINISH ☑ Above ground, Finished, ☐ Above ground, Unfinished, ☐ Buried, ☐ In Pit, ☐ Removed, ☐ None used, ☐ Other ________

10 CASING DETAILS Total length 21 ft. Length below l.s. 19 ft. Dia. 6 in. Material Steel Wt. 19 lb/ft

11 LINER OR INNER CASING DETAILS Length used ____ ft. Diameter ____ in. Material ____ Weight ____ lb/ft

12 METHOD OF SEALING CASING TO BEDROCK ☑ Drive Shoe, ☑ Grout - type Benseal, Drilled 9 in. hole 13 ft. in bedrock
☐ Other ________

13 SCREEN DETAILS Make and Type ________ Material ________ Length ________ ft. Diameter ________ in.
Slot Size ________ Depth to top of screen ________ feet below land surface ________ ft. Gravel packed and Gravel Size or Type ________

14 YIELD TEST ☐ Bailed ☐ Pumped, ☑ Compressed Air, for 3 hours at 12 Gallons per minute
Measured by ☑ Bucket, ☐ Orifice pipe, ☐ Weir, ☐ Meter ☐ Permanent airline installed

15 STATIC WATER LEVEL 15 feet below land surface, Date or Time measured 12/13/96, Overflows at ________ G.P.M.

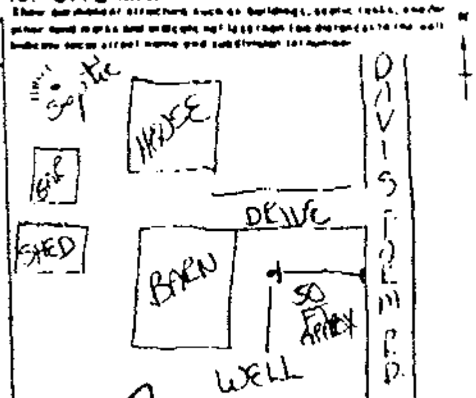
16 WATER ANALYSIS Has the water been analyzed? ☐ Yes ☑ No, If Yes, where ________

17 SPECIAL NOTES Well grouted with Benseal

18 WELL LOG

Depth from Land Surface Feet	Feet	Water Bearing	Formation Description	Source
Ground Surface	1		Topsoil	
1	8		brown sandy clay	
8	29		granite	
29	31	2	cracky brown ledge	
31	97		granite	
97	98	7	cracky brown ledge	
98	273		granite	
273	275	12	cracky brown ledge	
275	300		granite	

19. SITE MAP
Show permanent structures such as buildings, septic tanks, and/or other land marks and indicate not less than two distances to the well. Indicate local street name and subdivision lot number.



20 TESTED YIELD
If the yield was tested at different depths during drilling, list below.

Feet	Gallons Per Minute
50	2
100	7
275	12

WELL DRILLED BY Gary Opsey
DOING BUSINESS AS Hoardin Water Wells (Company or Business Name)
REPORT FILED BY Ted Hoddard (Authorized Signature)
DATE OF REPORT 12/13/96 WELL DRILLERS LIC. NO 174

Ground Water of Vermont

FIELD SUPERVISOR B. Hamilton
CONTRACTOR Roger Gosselin Inc.
DRILLERS

JOB LOCATION Savelle Farm
DATE 2/27/97 MW-

DRILLING METHOD Tracked excavator
BORING DIAMETER 2" well

AND 40 – 50%
SOME 10 – 40%
TRACE 0 – 10%

BORING LOCATION BORING # 1
sketch on back or on-site plan with measurements
TOTAL DEPTH 9'

DEPTH	SAMPLES	SAMPLE NUMBER	BLOWS PER 6" (0/6, 6/12, 12/18, 18/24)	REC.	SAMPLE DESCRIPTION	STRAT CHG	PID Response (ppm) GENERAL DESCRIPTION	WELL DETAIL	DEPTH
					poorly sorted sand and gravel		poorly sorted sand & gravel 768 ppm wet, strong odor 621 ppm 261 ppm, strong petr. odor	6" Sleeve, riser, Sand	
5'									5'
10'							Bedrock refusal at 10' 6' screen 3' riser		10'
15'									15'
20'									20'
25'									25'
30'									30'
35'									35'
40'									40'

MATERIALS USED	SIZE/TYPE	QUANTITY	MATERIALS USED	SIZE/TYPE	QUANTITY
WELL SCREEN	2" PVC		GROUT		
SLOT SIZE	0.10"		BACKFILL		
RISER PIPE	2" PVC		WATER USED		
GRADED SAND	-		STEAM CLEANER		
PELLET BENTONITE	✓				
GRANULAR BENTONITE					

Ground Water of Vermont

FIELD SUPERVISOR B. Hamilton
CONTRACTOR Roger Gosselin Inc.
DRILLERS

JOB LOCATION Savelle Farm
DATE 2/27/97 MW-

DRILLING METHOD excavator
BORING DIAMETER 2" well

AND 40 – 50%
SOME 10 – 40%
TRACE 0 – 10%

BORING LOCATION sketch on back or on-site plan with measurements

BORING # 2

TOTAL DEPTH 9'

DEPTH	SAMPLES	SAMPLE NUMBER	BLOWS PER 6" (0/6, 6/12, 12/18, 18/24)	REC.	SAMPLE DESCRIPTION	STRAT CHG	GENERAL DESCRIPTION	WELL DETAIL	DEPTH
					poorly sorted sand and gravel		1.6 ppm wet, no odor		
5'							5.6 ppm, wet Bedrock at 6'	6' Screen, riser, sand	5'
10'							Bedrock fractured to install well 6' screen 2½' riser		10'
15'									15'
20'									20'
25'									25'
30'									30'
35'									35'
40'									40'

MATERIALS USED	SIZE/TYPE	QUANTITY	MATERIALS USED	SIZE/TYPE	QUANTITY
WELL SCREEN	2" PVC		GROUT		
SLOT SIZE	0.10"		BACKFILL		
RISER PIPE	2" PVC		WATER USED		
GRADED SAND	-		STEAM CLEANER		
PELLET BENTONITE	✓				
GRANULAR BENTONITE					

Ground Water of Vermont

FIELD SUPERVISOR	B Hamilton
CONTRACTOR	Roger Gosselin Inc.
DRILLERS	
JOB LOCATION	Savelle Farm
DATE	2/27/97
	MW-

DRILLING METHOD	Excavator
BORING DIAMETER	2" well

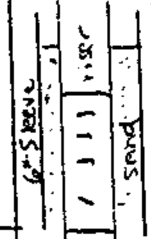
AND 40 – 50%
SOME 10 – 40%
TRACE 0 – 10%

BORING LOCATION — sketch on back or on-site plan with measurements

BORING # 3

TOTAL DEPTH 7'

DEPTH	SAMPLES	SAMPLE NUMBER	BLOWS PER 6" 0/6	6/12	12/18	18/24	REC.	SAMPLE DESCRIPTION	STRAT CHG	GENERAL DESCRIPTION	WELL DETAIL	DEPTH
								glatial till poorly sorted sand and gravel				
5'										1.0 ppm wet, no odor		5'
										1.8 ppm no odor		
										Bedrock at 6' bgs fractured to install well		
10'												10'
15'												15'
20'												20'
25'												25'
30'												30'
35'												35'
40'												40'



MATERIALS USED	SIZE/TYPE	QUANTITY
WELL SCREEN	2" PVC	
SLOT SIZE	0.10"	
RISER PIPE	2" PVC	
GRADED SAND	—	
PELLET BENTONITE	/	
GRANULAR BENTONITE		

MATERIALS USED	SIZE/TYPE	QUANTITY
GROUT		
BACKFILL		
WATER USED		
STEAM CLEANER		

Ground Water of Vermont

FIELD SUPERVISOR B Hamilton
CONTRACTOR Roger Gosselin Inc
DRILLERS

JOB LOCATION Savelle Farm
DATE 2/27/97 MW-

DRILLING METHOD Excavator
BORING DIAMETER 2" well

AND 40 – 50%
SOME 10 – 40%
TRACE 0 – 10%

BORING LOCATION BORING # 4
sketch on back or on-site plan with measurements
TOTAL DEPTH 6'

DEPTH	SAMPLES SAMPLE NUMBER	BLOWS PER 6" (0/6, 6/12, 12/18, 18/24)	REC.	SAMPLE DESCRIPTION	STRAT CHG	GENERAL DESCRIPTION	WELL DETAIL	DEPTH
				poorly sorted sand and gravel			6" steel; 2" PVC; sand	
5'				fractured ledge		0.1 ppm vol; no odor		5'
						Bedrock at 3' - Fractured to install MW 3' screen 3' riser		
10'								10'
15'								15'
20'								20'
25'								25'
30'								30'
35'								35'
40'								40'

MATERIALS USED	SIZE/TYPE	QUANTITY	MATERIALS USED	SIZE/TYPE	QUANTITY
WELL SCREEN	2" PVC		GROUT		
SLOT SIZE	0.10"		BACKFILL		
RISER PIPE	2" PVC		WATER USED		
GRADED SAND	-		STEAM CLEANER		
PELLET BENTONITE	-				
GRANULAR BENTONITE					

SAVELLE FARM
TEST PIT RESULTS*

Test Pit I. D.	Sample Location (ft bgs)	PID Response ppm	Description
TP-1	4	0.3	dry, no odor
	8	1.1	wet, no odor, bedrock refusal
TP-2	4	0.2	dry, no odor
	6	884	wet, strong petroleum odor and staining, bedrock refusal
TP-3	4	0.4	dry, no odor
	8	0.3	dry, bedrock refusal

* See Figure 2 Appendix A for test pit locations

APPENDIX C

Laboratory Report Forms

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

TOTAL PETROLEUM HYDROCARBONS (TPH) BY MODIFIED EPA METHOD 8100

DATE: March 7, 1997
CLIENT: GroundWater of Vermont
PROJECT: Savelle Farm/V970
PROJECT CODE: GWVT1153
COLLECTED BY: Bruce Hamilton
DATE SAMPLED: February 27, 1997
DATE RECEIVED: February 27, 1997

Reference #	Sample ID	Concentration (mg/L)[1]
100,378	Supply Well; 0836	ND[2]

Notes:

1 Method detection limit is 1.0 mg/L.
2 None detected

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

EPA METHOD 8020--PURGEABLE AROMATICS

CLIENT: GroundWater of Vermont
PROJECT NAME: Savelle Farm
CLIENT PROJ. #: V97-006

DATE RECEIVED: March 13, 1997
REPORT DATE: March 20, 1997
PROJECT CODE: GWVT1315

Ref. #:	100,776	100,777	100,778	100,779	100,780
Site:	Trip Blank	MW-1	MW-2	MW-3	MW-4
Date Sampled:	3/13/97	3/13/97	3/13/97	3/13/97	3/13/97
Time Sampled:	6:20	10:20	10:00	10:10	9:45
Sampler:	B. Hamilton	B. Hamilton	B. Hamilton	B. Hamilton	B. Hamilton
Date Analyzed:	3/19/97	3/2/97	3/19/97	3/19/97	3/19/97
UIP Count:	0	>10	>10	>10	>10
Dil. Factor (%):	100	20	100	100	100
Surr % Rec. (%):	91	113	100	89	95
Parameter	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)
Benzene	<1	<5	<1	<1	<1
Chlorobenzene	<1	<5	<1	<1	<1
1,2-Dichlorobenzene	<1	<5	<1	<1	<1
1,3-Dichlorobenzene	<1	<5	<1	<1	<1
1,4-Dichlorobenzene	<1	<5	<1	<1	<1
Ethylbenzene	<1	144.	<1	<1	<1
Toluene	<1	10.4	<1	<1	<1
Xylenes	<1	531.	1.3	1.2	1.0
MTBE	<1	<5	<1	<1	<1

Ref. #:	100,781
Site:	Duplicate
Date Sampled:	3/13/97
Time Sampled:	NI
Sampler:	B. Hamilton
Date Analyzed:	3/19/97
UIP Count:	>10
Dil. Factor (%):	2
Surr % Rec. (%):	87
Parameter	Conc. (ug/L)
Benzene	<50
Chlorobenzene	<50
1,2-Dichlorobenzene	<50
1,3-Dichlorobenzene	<50
1,4-Dichlorobenzene	<50
Ethylbenzene	182.
Toluene	TBQ <50
Xylenes	531.
MTBE	<50

Note: UIP = Unidentified Peaks TBQ = Trace Below Quantitation NI = Not Indicated

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 8020 COMPOUNDS BY EPA METHOD 8260

CLIENT: GroundWater of Vermont
PROJECT NAME: Savelle Farm/V970
REPORT DATE: March 7, 1997
SAMPLER: Bruce Hamilton
DATE SAMPLED: February 27, 1997
DATE RECEIVED: February 27, 1997

PROJECT CODE: GWVT1152
ANALYSIS DATE: March 5, 1997
STATION: Trip Blank
REF.#: 100,376
TIME SAMPLED: 0810

Parameter	Detection Limit (ug/L)	Concentration (ug/L)
Benzene	1	ND[1]
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylene	1	ND
MTBE	1	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane:	105.%
Toluene-d8:	94.%
4-Bromofluorobenzene:	104.%

NOTES:
1 None detected

ENDYNE, INC.

Laboratory Services

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Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 8020 COMPOUNDS BY EPA METHOD 8260

CLIENT: GroundWater of Vermont
PROJECT NAME: Savelle Farm/V970
REPORT DATE: March 7, 1997
SAMPLER: Bruce Hamilton
DATE SAMPLED: February 27, 1997
DATE RECEIVED: February 27, 1997

PROJECT CODE: GWVT1152
ANALYSIS DATE: March 5, 1997
STATION: Supply Well
REF.#: 100,377
TIME SAMPLED: 0836

Parameter	Detection Limit (ug/L)	Concentration (ug/L)
Benzene	1	ND[1]
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylene	1	ND
MTBE	1	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane:	103.%
Toluene-d8:	95.%
4-Bromofluorobenzene:	108.%

NOTES:
1 None detected

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: GroundWater of Vermont
PROJECT NAME: Savelle Farm
REPORT DATE: March 20, 1997
DATE SAMPLED: March 13, 1997

PROJECT CODE: GWVT1315
REF.#: 100,776 - 100,781

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced method and within the specified holding times. All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced method. Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate recovery data was determined to be within laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

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ENDYNE, INC.

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

208[illegible]

CHAIN-OF-CUSTODY RECORD

V97-006 100,776 — 100,787

Project Name: Savelle Farm Site Location: Holland, VT	Reporting Address: Ground Water of VT 1 Mill St. Bx C5 Burlington VT	Billing Address:
Endyne Project Number: GWVT1315	Company: Contact Name/Phone #:	Sampler Name: Bruce Hamilton Phone #: (802) 860-6065

Lab #	Sample Location	Matrix	GRAB	COMP	Date/Time	Sample Containers No.	Sample Containers Type/Size	Field Results/Remarks	Analysis Required	Sample Preservation	Rush
100,776	Trip Blank	water	X		3/13/97 0620	2	glass 40cc		8020	I, HCl	
100,777	MW-1	↓	↓		1020	4	↓		30	↓	
100,778	MW-2	↓	↓		1000	↓	↓		↓	↓	
100,779	MW-3	↓	↓		1010	↓	↓		↓	↓	
100,780	MW-4	↓	↓		0945	↓	↓		↓	↓	
100,781	Duplicate	↓	↓		—	↓	↓		↓	↓	

Relinquished by: Signature Bruce Hamilton	Received by: Signature M. Chambers	Date/Time 3-13-97 1:05
Relinquished by: Signature	Received by: Signature	Date/Time

New York State Project: Yes ____ No X

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	27	EPA 8010/8020
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8080 Pest/PCB
4	Nitrite N	9	BOD,	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
(30)	Other (Specify): EPA 8020 + TPH										

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Ground Water of Vermont
PROJECT NAME: Savelle Farm/ V97-006
DATE REPORTED: March 28, 1997
DATE SAMPLED: March 13, 1997

PROJECT CODE: GWVT1316
REF. #: 100,783 - 100,787

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody record.

Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy were monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

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ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

TOTAL PETROLEUM HYDROCARBONS (TPH) BY MODIFIED EPA METHOD 8100

DATE: March 28, 1997
CLIENT: Ground Water of Vermont
PROJECT: Savelle Farm / V97-006
PROJECT CODE: GWVT1316
COLLECTED BY: Bruce Hamilton
DATE SAMPLED: March 13, 1997
DATE RECEIVED: March 13, 1997

Reference #	Sample ID	Concentration (mg/L)[1]
100,783	MW-1; 1020	13.0
100,784	MW-2; 1000	ND[2]
100,785	MW-3; 1010	ND
100,786	MW-4; 0945	ND
100,787	Duplicate	15.1

Notes:

1 Method detection limit is 1.0 mg/L.
2 None detected

ENDYNE, INC.

Laboratory Services

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(802) 879-4333
FAX 879-7103

EPA METHOD 8020--PURGEABLE AROMATICS

CLIENT: GroundWater of Vermont
PROJECT NAME: Savelle Farm
CLIENT PROJ. #: V97-006

DATE RECEIVED: March 13, 1997
REPORT DATE: March 20, 1997
PROJECT CODE: GWVT1315

Ref. #:	100,776	100,777	100,778	100,779	100,780
Site:	Trip Blank	MW-1	MW-2	MW-3	MW-4
Date Sampled:	3/13/97	3/13/97	3/13/97	3/13/97	3/13/97
Time Sampled:	6:20	10:20	10:00	10:10	9:45
Sampler:	B. Hamilton	B. Hamilton	B. Hamilton	B. Hamilton	B. Hamilton
Date Analyzed:	3/19/97	3/2/97	3/19/97	3/19/97	3/19/97
UIP Count:	0	>10	>10	>10	>10
Dil. Factor (%):	100	20	100	100	100
Surr % Rec. (%):	91	113	100	89	95
Parameter	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)
Benzene	<1	<5	<1	<1	<1
Chlorobenzene	<1	<5	<1	<1	<1
1,2-Dichlorobenzene	<1	<5	<1	<1	<1
1,3-Dichlorobenzene	<1	<5	<1	<1	<1
1,4-Dichlorobenzene	<1	<5	<1	<1	<1
Ethylbenzene	<1	144.	<1	<1	<1
Toluene	<1	10.4	<1	<1	<1
Xylenes	<1	531.	1.3	1.2	1.0
MTBE	<1	<5	<1	<1	<1

Ref. #:	100,781
Site:	Duplicate
Date Sampled:	3/13/97
Time Sampled:	NI
Sampler:	B. Hamilton
Date Analyzed:	3/19/97
UIP Count:	>10
Dil. Factor (%):	2
Surr % Rec. (%):	87
Parameter	Conc. (ug/L)
Benzene	<50
Chlorobenzene	<50
1,2-Dichlorobenzene	<50
1,3-Dichlorobenzene	<50
1,4-Dichlorobenzene	<50
Ethylbenzene	182.
Toluene	TBQ <50
Xylenes	531.
MTBE	<50

Note: UIP = Unidentified Peaks TBQ = Trace Below Quantitation NI = Not Indicated

ENDYNE, INC.

20850

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

V97-006

CHAIN-OF-CUSTODY RECORD

Project Name: Savelle Farm Site Location: Holland, VT	Reporting Address: Ground Water of VT 1 Mill St. Bx G5 Burlington, VT	Billing Address:
Endyne Project Number: BWVT1316	Company: Contact Name/Phone #:	Sampler Name: Bruce Hamilton Phone #: (802) 860-6065

Lab #	Sample Location	Matrix	GRAB	COMP	Date/Time	Sample Containers No.	Sample Containers Type/Size	Field Results/Remarks	Analysis Required	Sample Preservation	Rush
~~100,782~~	Trip Blank	water	X		3/13/97 0620	2	9/ASS 40cc		~~8~~8020	I, HCl	
100,783	MW-1				1020	4			30		
100,784	MW-2				1000						
100,785	MW-3				1010						
100,786	MW-4				0945						
100,787	Duplicate				—						

Relinquished by: Signature Bruce Hamilton	Received by: Signature M. Chalcra	Date/Time 3-13-97 1:05
Relinquished by: Signature	Received by: Signature	Date/Time

New York State Project: Yes ____ No X

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	27	EPA 8010/8020
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8080 Pest/PCB
4	Nitrite N	9	BOD_5	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify): EPA 8020 + TPH*										

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: GroundWater of Vermont
PROJECT NAME: Savelle Farm
REPORT DATE: March 20, 1997
DATE SAMPLED: March 13, 1997

PROJECT CODE: GWVT1315
REF.#: 100,776 - 100,781

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced method and within the specified holding times. All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced method. Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate recovery data was determined to be within laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

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ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: GroundWater of Vermont
PROJECT NAME: Savelle Farm/V970
DATE REPORTED: March 7, 1997
DATE SAMPLED: February 27, 1997

PROJECT CODE: GWVT1153
REF. #: 100,378

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody record.

Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy were monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

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ENDYNE, INC.
32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

V970

CHAIN-OF-CUSTODY RECORD

Project Name: Saville Farm Site Location: Holland, VT	Reporting Address: GWV 1 Mill St Bx C-5 Burlington	Billing Address:
Endyne Project Number: GWVT1153	Company: Contact Name/Phone #:	Sampler Name: Bruce Hamilton Phone #: (802) 860-6185

Lab #	Sample Location	Matrix	GRAB	COMP	Date/Time	Sample Containers No.	Sample Containers Type/Size	Field Results/Remarks	Analysis Required	Sample Preservation	Rush
	Trip Blank	water	X		2/27/97 0830	4	40ml Glass		8020	HCl	
100376	Supply Well	↓	↓		↓ 0836	4	↓	TPH 8100	30	↓	

Relinquished by: Signature Bruce Hamilton	Received by: Signature	Date/Time 2/27/97 4:45
Relinquished by: Signature	Received by: Signature	Date/Time

New York State Project: Yes ____ No X

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	27	EPA 8010/8020
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8080 Pest/PCB
4	Nitrite N	9	BOD_5	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify): 8020 + TPH										

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: GroundWater of Vermont
PROJECT NAME: Savelle Farm/V970
DATE REPORTED: March 7, 1997
DATE SAMPLED: February 27, 1997

PROJECT CODE: GWVT1152
REF. #: 100,376 - 100,377

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody record.

Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

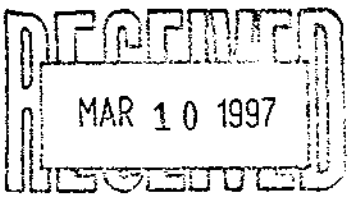
Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy were monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate data was determined to be within Laboratory QA/QC quidelines unless otherwise noted.

Reviewed by,

for
Harry B. Locker, Ph.D.
Laboratory Director



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ENDYNE, INC. GWVT1153 20851

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

CHAIN-OF-CUSTODY RECORD

V970 100,376 —— 100,378

Project Name: Savelle Farm Site Location: Holland, VT	Reporting Address: GWV 1 Mill St Bx C-5 Burlington	Billing Address:
Endyne Project Number: GWVT1152	Company: Contact Name/Phone #:	Sampler Name: Bruce Hamilton Phone #: (802) 860-1065

Lab #	Sample Location	Matrix	GRAB	COMP	Date/Time	Sample Containers No.	Sample Containers Type/Size	Field Results/Remarks	Analysis Required	Sample Preservation	Rush
100,376	trip Blank	water	X		2/27/97 0830	4	GLASS VOL		8020	HCL	
100,377	Supply Well	↓	↓		↓ 0836	4	↓		30	↓	

Relinquished by: Signature Bruce Hamilton	Received by: Signature	Date/Time 2/27/97 4:45
Relinquished by: Signature	Received by: Signature	Date/Time

New York State Project: Yes ____ No X

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	27	EPA 8010/8020
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8080 Pest/PCB
4	Nitrite N	9	BOD_5	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify): 8020 + TPH										